



Launch Mission Execution Forecast

Mission: Falcon 9 NROL-108

Issued: 17 Dec 2020 / 1130L (1630Z)

Valid: 18 Dec 2020 / 0900 – 1200L (1400 – 1700Z)



Forecast Discussion: High-pressure will build in across Central Florida behind the front. The northerly winds will become gusty in the afternoon along the Space Coast while cloud cover clears through the day. It will be a chilly start to the day Friday at the Spaceport with mostly clear skies. Winds will remain gusty from the northeast due to the strength of the high-pressure area. The primary weather concern for Friday's attempt is Liftoff Winds.

On Saturday winds will become easterly and weaken as the high-pressure center moves over the Outer Banks. These onshore winds will bring any weak showers over the Gulf Stream towards the Space Coast. The primary weather concern for an attempt Saturday is Cumulus Clouds associated with these coastal showers.

Launch Day	Probability of Violating Weather Constraints				
	20%	Primary Concerns: Liftoff Winds			
	Weather Conditions				Additional Risk Criteria
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Moderate
	Temp/Humidity: 50→60°F / 72%	Type	Coverage	Base (ft)	Tops (ft)
24-Hour Delay	Liftoff Winds (200'): 010° 17-22 mph	Stratocumulus	Few	2,000	4,000
		Cirrostratus	Scattered	28,000	30,000
					Booster Recovery Weather: Moderate
					Solar Activity: Low
	Probability of Violating Weather Constraints				
	20%	Primary Concerns: Cumulus Cloud Rule			
	Weather Conditions				Additional Risk Criteria
	Weather/Visibility: Isold Showers / 7 mi.	Clouds			Upper-Level Wind Shear: Low
	Temp/Humidity: 64°F / 65%	Type	Coverage	Base (ft)	Tops (ft)
	Liftoff Winds (200'): 090° 15-20 mph	Cumulus	Scattered	3,500	8,000
					Booster Recovery Weather: Low
					Solar Activity: Low
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.					
Next Forecast Will Be Issued		As Required			